



Fact Sheet

Minimizing the Impacts of Cannabis Cultivation on California Lands and Waterways

Following recent changes in state law and voter-approved initiatives, California's commercial cultivation of cannabis for recreational and medical use is expected to grow significantly. The State Water Resources Control Board (State Water Board) has released a draft state policy for water quality control (policy) to set up strict environmental standards and a permitting system to protect flow and water quality in the state's rivers and streams. This draft policy does **not** apply to personal cultivation for recreational use.

Overview

The State Water Board's *Cannabis Cultivation Policy, Principles and Guidelines for Cannabis Cultivation*, is being developed to satisfy the requirements of recent legislation and Water Code section 13149 that mandates the State Water Board ensure the impacts of water diversions and discharges associated with cannabis cultivation do not adversely affect instream flows for fish and water quality.

The Board anticipates implementing the Policy through water quality permits issued under a general waste discharge requirement order, small irrigation use registrations for the diversions and storage of water, and other programs.

Among other things, the State Water Board has been legislatively-mandated to protect aquatic habitat, wetlands, and springs from harm caused by cannabis cultivation, which includes requirements for groundwater pumping where necessary to protect surface water flows.

This Policy requires compliance with environmental rules and ensures measures are taken to avoid damage associated with cannabis cultivation activities, which is vital to the protection of remote, environmentally-sensitive areas where some cannabis grow sites are concentrated. The draft Policy was developed in consultation with the California Department of Fish and Wildlife (CDFW) and the California Department of Food and Agriculture (CDFA).

The draft Policy and general order also fulfill legislative mandates to support the [CDFA CalCannabis Licensing Program](#). The proposed general order builds on, and is informed by, existing regulations developed by the [North Coast](#) and [Central Valley](#) regional water quality control boards and upon approval, will replace these regional solutions and establish a statewide general permit.



The Problem

Cannabis cultivation has been increasing in recent years, and the expansion is accelerating with the legalization of recreational cannabis use. A 2015 study by CDFW looked at four small watersheds in Humboldt County and found that the number of acres in those areas doubled from 2009 to 2012, with more than 2,000 cannabis cultivation sites in those four small watersheds alone. Field observations indicate that the number of cultivation sites is continuing to increase at an even greater rate since 2012 and cultivation sites are now being developed in new areas of the state where it previously did not occur.

Left unregulated, cannabis farming and cultivation can pose serious threats to water quality, fish and wildlife, aquatic habitats, and wetlands. Environmental impacts due to cannabis cultivation can include the release of fertilizers, pesticides and other supplements that degrade water quality or threaten wildlife. Excessive diversions can injure fish or even dewater smaller streams.

The risks to water quality from unregulated cannabis cultivation and irrigation techniques include sediment loading and debris deposit in waterways, and physical alteration of the land that can harm stream habitat and the wildlife in and around the stream.

Since 2013, the State Water Board's [Office of Enforcement](#) has worked closely with CDFW to address adverse environmental impacts from cannabis cultivation. In that time, both the [North Coast](#) and [Central Valley](#) regional water boards adopted regulations that establish rules for cannabis grow operations, and include inspections and onsite guidance to reconcile issues like allegations of unpermitted water use, overuse of nutrients and pesticides, as well as damage to aquatic habitat and fish-spawning areas. In some cases, these incidents have resulted in enforcement actions that included fines and citations.

Regulatory Approach

The Policy serves as a regulation that establishes statewide cannabis cultivation requirements. As proposed, the draft requirements established by the Policy will be incorporated into two permits issued by the State Water Board.

The first permit is a water quality permit referred to as a *Statewide General Order for Waste Discharge (Cannabis General Order)*.

The second permit is a water right permit referred to as a *Cannabis Small Irrigation Use Registration*.

The requirements of these permits, will also be conditions of the commercial cannabis licenses issued by the CDFA under its CalCannabis Cultivation Licensing Program. The Policy and permits only apply to cannabis cultivation and are specifically developed to address Proposition 215, the Compassionate Use Act (CUA) which established the medical cannabis industry and Proposition 64, the Adult Use of Marijuana Act (AUMA), which legalized

recreational cultivation, possession and use of limited amounts of cannabis by adults over 21 years of age. The Policy includes requirements related to both water diversion and waste discharge associated with cannabis cultivation.

Proposed Policy requirements that specifically address water quality and flow impacts associated with cannabis cultivation-related water diversions and use include:

- maximum diversion rates;
- a forbearance period (no diversions) during the dry season;
- numeric and narrative flow (these phrases mean the minimum amount of water that must be left in a stream, and the amount of water bypassed during the wet season when water diversions are typically allowed) requirements during the wet season;
- water conservation irrigation methods; and
- provisions to institute a groundwater forbearance period, if necessary to protect surface flows.

These types of water diversion and use requirements are needed to ensure that water diversions for cannabis cultivation do not affect instream flows needed for fish, to maintain aquatic habitat, and protect aquatic resources. The flow requirements apply statewide and may be modified overtime, as needed, as more information becomes available on cannabis cultivation water demand, the location and density of cannabis cultivation, and the protectiveness of the flow requirements.

The Policy also establishes requirements (best practical treatment or control measures) for:

- riparian and wetland protection and management;
- water diversion, storage, and use;
- irrigation runoff;
- land development and maintenance, erosion control, and drainage features;
- soil disposal;
- stream crossing installation and maintenance;
- fertilizer, chemical, and soil use and storage;
- cultivation-related waste disposal;
- refuse and human waste disposal; and
- winterization (preparing post-harvest lands for adverse winter weather conditions).

Examples of the type of protective measures include limiting disturbance to dry periods, restrictions on irrigation and sediment runoff, preparation of erosion prevention plans for steeper sites and implementation of erosion control measures on all sites, riparian setbacks, and others.

Impacts from the discharge of waste and diversion of water associated with cannabis cultivation activities are address through the statewide Cannabis General Order with water quality provisions tiered with increasingly protective requirements for larger and higher risk

sites. The Cannabis General Order incorporates a tier structure for permitting discharges and threatened discharges of waste, establishes a personal use exemption standard, and provides conditional exemption criteria for activities with a low threat to water quality. The criteria for the tier structure consist of three exemptions and two tiers, as follows:

- a. Personal use exempt Cannabis Cultivators are very small cultivators that are conditionally exempt from the Cannabis General Order.
- b. Certain indoor cultivation activities are conditionally exempt from the Cannabis General Order.
- c. Conditionally exempt Cannabis Cultivators cultivate cannabis commercially and disturb less than 2,000 square feet.
- d. Tier 1 Cannabis Cultivators have a disturbed area greater than 2,000 square feet and less than 1 acre (43,560 square feet).
- e. Tier 2 Cannabis Cultivators have a disturbed area equal to or greater than 1 acre.

Next Steps

July 7, 2017 – Draft Cannabis Policy and Cannabis General Order released for Public Comment

July 2017 – Informational Staff Workshops: July 20, Eureka; July 27, Sacramento

August 2, 2017 – Board Workshop for Draft Cannabis Policy and General Order

September 6, 2017 – End 60-day comment period on draft Policy and General Order documents

October 17, 2017 – State Water Board meeting to consider adoption of final Cannabis Policy, Cannabis General Order, and General Conditions for Statewide Cannabis Small Irrigation Use Registration

Additional Resources

State Water Board [Cannabis Cultivation Regulatory webpage](#).

(This fact sheet was last updated July 7, 2017)